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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,137	02/26/2002	Jay L. Hanson	090402-9203-00	3382

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EXAMINER

SHECHTMAN, SEAN P

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 03/30/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/083,137

Applicant(s)

HANSON, JAY L.

Examiner

Sean P. Shechtman

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-51 and 53-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-51 and 53-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Art Unit: 2125

DETAILED ACTION

1. In response to applicant's submittal that the Applicant of the present Application is the same Jay L. Hanson as the sole inventor of the '256 Publication, namely Jay Lowell Hanson, the 35 U.S.C. 102(e) rejection of claims 23, 28, 29, 45, 53 and 57, as being anticipated by U.S. Pub. No. 2003/0024256 to Hanson has been withdrawn.

2. Claims 23-51 and 53-60 are presented for examination. Claims 1-22 and 52 have been cancelled. Claims 23, 28, 29, 40, 45, 53, and 55-58 have been amended.

Specification

3. Objection withdrawn due to the amendment.

Claim Rejections - 35 USC § 112

4. Rejections withdrawn due to the amendment.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 23, 24, 26, 27, 33, 36-39, 49, 53, 55, 56, and 58-60 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,104,037 to Karg.

Referring to claims 23, 24, 27, 33, 36-39, 45, 49, 53, 56, 58-60, Karg discloses a method and apparatus for controlling a transport temperature control unit to maintain a conditioned space within a transport at a temperature setpoint (Col. 1, lines 7-25; Col. 3, line 59 – Col. 4, line 5; Col. 5, line 28 – Col. 6, line 30), the temperature control having cooling and heating cycles for cooling and heating a plurality of conditioned spaces (Col. 4, lines 1-2; Col. 10, lines 5-15) within a plurality of mass transit transports (Abstract, i.e., for mass transit vehicles; See also Col.

Art Unit: 2125

6, lines 20-30 and Col. 10, lines 5-15), each mass mass transit vehicle having a plurality of temperature control units (Col. 10, lines 5-25), the temperature control unit including a programmable temperature range (Col. 2, lines 49-68), the method comprising:

programming into the unit a first pre-programmed control mode for maintaining the temperature setpoint (Col. 5, lines 48-66);

configuring the unit such that a second control mode for maintaining the temperature setpoint is programmable into the unit by an end user (Col. 6, lines 47-65);

selecting numerical temperature values for the programmable temperature range, the selection of numerical values being made by the end user (Col. 5, line 67 – Col. 6, line 46);

selecting the first pre-programmed control mode for operation of the programmable temperature range or to program the second control mode into the unit for operation of the programmable temperature range, the selection of the first pre-programmed or to program the second control mode being made by the end user; and programming the second control mode into the programmable temperature range by the end user when the second control mode is desired by the end user, and using the second control mode (Col. 6, lines 47-65).

Referring to claims 26 and 55, Karg teaches the method and apparatus above, further including the step of programming a priority for the programmable temperature range by the end user (Col. 6, lines 47-65).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 2125

6. Claims 25 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,104,037 to Karg as applied to the claims above, and further in view of Applicant's Admitted Prior Art (AAPA).

Referring to claims 25 and 54, Karg fails to teach method and apparatus above, wherein the numerical temperature values include a minimum temperature value and a maximum temperature value.

However, AAPA teaches analogous art, wherein the numerical temperature values include a minimum temperature value and a maximum temperature value (See page 1, lines 12-27 of the instant specification).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of AAPA with the temperature control system of Karg.

One of ordinary skill in the art would have been motivated to combine these references because AAPA teaches temperature control unit ranges that have a minimum and maximum temperature range are commonly known in the art.

7. Claims 28, 29, 32, 40, 48, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,104,037 to Karg as applied to the claims above, and further in view of U.S. Pat. No. 5,557,941 to Hanson.

Referring to claims 32 and 48, Karg fails to teach the method and apparatus above, wherein the step of programming includes the step of programming a restart temperature at which temperature the conditioned space restarts from a null condition.

Art Unit: 2125

Referring to claims 28, 29, 40, and 57, Karg fails to teach the method and apparatus above, wherein the step of programming unit control modes for the programmable temperature range further includes selecting a continuous mode.

However, referring to claims 32 and 48, Hanson teaches analogous art (Claim 1 of '941), wherein a transport refrigeration unit (Col. 1, lines 9-13 of '941) includes a method and apparatus for programming a unit control mode (Figs. 2-6, Col. 3, lines 7-29) for a programmable temperature range (Col. 3, lines 1-6; Col. 5, lines 18-65),

wherein the step of programming includes the step of programming a restart temperature at which temperature the conditioned space restarts from a null condition (See Col. 2, lines 44-59 of '941).

Referring to claims 28, 29, 40, and 57, Hanson teaches analogous art, wherein the step of programming unit control modes for the programmable temperature range further includes selecting one of a continuous mode (Col. 2, lines 25-43 of '941).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hanson with the temperature control system of Karg.

One of ordinary skill in the art would have been motivated to combine these references because Hanson teaches improved refrigeration units operable in a continuous mode and wherein an operator can insure a predetermined minimum average air flow will match air flow requirements of the load being conditioned (Col. 2, lines 2-59 of '941).

Art Unit: 2125

8. Claims 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,104,037 to Karg in view of U.S. Pat. No. 5,557,941 to Hanson, as applied to the claims above, and further in view of U.S. Pat. No. 5,515,693 to Cahill-O'Brien (See IDS filed June 17th 2002).

Referring to claims 41-44, Karg fails to teach the method and apparatus above, further including the step of selecting a first priority for the first programmable temperature range and a second priority for the second programmable temperature range by the end user and further including the step of operating the temperature control unit in the unit control mode corresponding to which of the first priority and the second priority have the higher priority.

However, referring to claims 41-44, Cahill-O'Brien teaches analogous art, including the step of selecting a first priority for a first programmable temperature range and a second priority for a second programmable temperature range by the end user and further including the step of operating the temperature control unit in the unit control mode corresponding to which of the first priority and the second priority have the higher priority (Col. 5, line 55 – Col. 6, line 12 of '693).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Cahill-O'Brien with the temperature control system of Karg.

One of ordinary skill in the art would have been motivated to combine these references because Cahill-O'Brien teaches a controlled atmosphere system that does not operate unless the conditions within the conditioned space are properly met (Col. 2, lines 15-23 of '693).

Art Unit: 2125

Furthermore, Cahill-O'Brien teaches programming the operation of the controller of the atmosphere system with the acceptable conditions for operation (Col. 2, lines 30-32 of '693).

9. Claims 31, 34, 47, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,104,037 to Karg as applied to the claims above, and further in view of U.S. Pat. No. 5,123,252 to Hanson.

Referring to claims 31, 34, 47, and 50, Karg fails to teach the method and apparatus above, wherein the step of programming the second control mode includes the step of programming a high speed cool to low speed cool switch point at which point the unit switches between high speed cool and low speed cool in the conditioned space, and programming a low speed heat to low speed cool switch point at which point the unit switches between low speed heat and low speed cool in the conditioned space.

However, referring to claims 31, 34, 47, and 50, Hanson teaches analogous art, wherein a step of programming a second control mode includes the step of programming a high speed cool to low speed cool switch point at which point the unit switches between high speed cool and low speed cool in the conditioned space, and programming a low speed heat to low speed cool switch point at which point the unit switches between low speed heat and low speed cool in the conditioned space (Col. 9, lines 19-37 of '252).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hanson with the temperature control system of Karg.

Art Unit: 2125

One of ordinary skill in the art would have been motivated to combine these references because Hanson teaches look up tables are accessed by a microprocessor to determine high and low trips and correct functionality of each operating condition in a selected control algorithm (Col. 1, lines 33-64 of '252).

10. Claims 30 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,104,037 to Karg as applied the claims above, and further in view of Re. 36,437 to Hanson.

Referring to claims 30 and 46, Karg fails to teach the method and system above, wherein the step of programming includes the step of selectively programming a fuel saver timer operable to decrease fuel consumption of the unit.

However, referring to claims 30 and 46, Hanson teaches analogous art, wherein a step of programming includes the step of selectively programming a fuel saver timer operable to decrease fuel consumption of the unit (Col. 1, lines 51-65; Col. 5, lines 53-64; Col. 11, lines 20-34; Col. 19, lines 38-48 of '437).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hanson with the temperature control system of Karg.

One of ordinary skill in the art would have been motivated to combine these references because Hanson teaches a new and improved method for operating an engine in an automatic start-stop mode to conserve fuel while maintaining the engine in a ready-to-start condition (Col. 1, lines 51-65 of '437).

11. Claims 35 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,104,037 to Karg as applied to the claims above, and further in view of U.S. Pat. No. 5,564,285 to Jurewicz.

Referring to claims 35 and 51, Karg fails to teach the method and apparatus above, wherein the step of programming includes the step of programming door switch options by the end user.

However, referring to claims 35 and 51, Jurewicz teaches analogous art, wherein the step of programming includes the step of programming door switch options by the end user (Col. 5, line 20 – Col. 6, line 10 of '285).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Jurewicz with the temperature control system of Karg.

One of ordinary skill in the art would have been motivated to combine these references because Jurewicz teaches a data logger to economically convert time based data logger to a time and event based data logger (Col. 1, line 41 – Col. 2, line 26 of '285).

Response to Arguments

Applicant's arguments filed January 15th 2004 have been fully considered but they are not persuasive.

12. Applicant argues that Karg does not teach any second control mode. Applicant argues that Karg does not teach a second, user-selectable and user programmable control mode for

Art Unit: 2125

maintaining the temperature setpoint. Applicant argues that Karg does not have the ability to program a second control mode. Examiner respectfully disagrees.

Karg clearly teaches that the operator can “reprogram the remote climate control program, and the heating element control 26, evaporator and compressor control 28 and fan control 30 will automatically respond.” (Col. 6, lines 47-65). Hence, the examiner respectfully asserts that the term “reprogram” clearly does teach the ability to program a second control mode. Karg even teaches reason why that the operator reprograms the control program, i.e. when the inputted unit value changes and the programmed stored temperature values are no longer desired (Col. 6, lines 47-65; Col. 6, lines 20-30), therefore the reprogrammed control program (i.e., a second control program) is clearly different from the original or first control program.

Conclusion

13. Applicant's amendment necessitated any new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2125

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents or publications are cited to further show the state of the art with respect to prioritized control of different conditioned spaces of a motor vehicle cabin.

U.S. Pat. No. 6,607,029 to Danieau.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (703) 305-7798.

The examiner can normally be reached on Monday-Friday from 9:30am to 6:00pm.

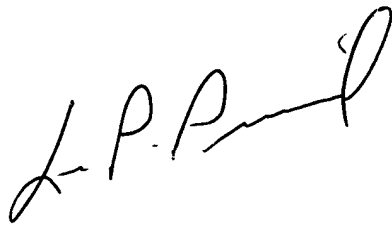
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard, can be reached on (703) 308-0538. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

SPS

Sean P. Shechtman

March 20, 2004



LEO PICARD
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